

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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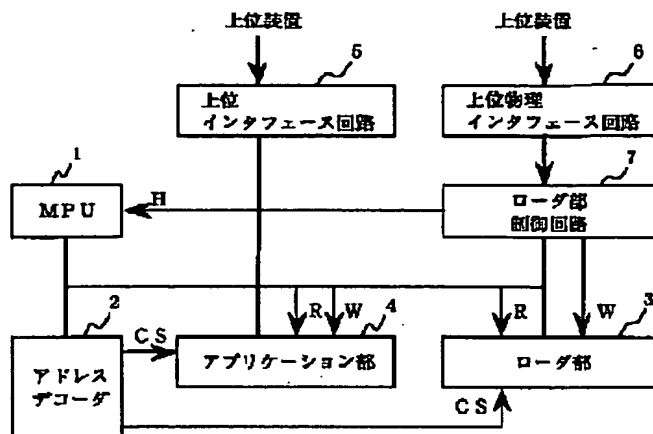
APPLICATION DATE : 28-04-95  
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APPLICANT : NEC CORP;

INVENTOR : MATSUSHITA NAOYUKI;

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TITLE : METHOD AND DEVICE FOR  
DOWN-LOADING FIRMWARE



ABSTRACT : PURPOSE: To allow a host device to directly rewrite data in an electric write enable memory of a loader section by stopping the operation of a microprocessor and storing a firmware transferred from the host device to the loader section not through the processing of the microprocessor.

CONSTITUTION: Processing data of a loader section 3 are read out of an electrically write enable memory by an MPU 1, the control of a host interface circuit 5 and file transfer from the host device are executed and the result is written in an electrically write enable memory of an application section 4. Then, the firmware of the loader section 3 is conducted by transferring the data of the firmware loaded newly from the host device not through the processing of the MPU 1 via a physical interface circuit 6, and when a loader section control circuit 7 receives data from the physical interface circuit 6, the operation of the MPU 1 is stopped and the data are written in the electrically write enable memory of the loader section 3. Thus, the firmware can be revised.

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